ILLINOIS ENVIRONMENTAL PROTECTION AGENCY MEMORANDUM

EPA Region 5 Records Ctr.
282615

DATE: September 22, 1981; November 19, 1981

TO: Field Operations Section & Records Unit/DWPC

FROM: Timothy R. Kluge, Region V Springfield, FOS/DWPC

SUBJECT: Sherwin-Williams Chemical Company (Hillsboro, Montgomery County) -- Wastewater Discharges Reconnaissance Inspection

Interviewed: Peter Meehan, General Manager

On the above dates, I conducted surveys of the Sherwin-Williams plant site in Hillsboro to determine water pollution potential. The site was purchased by Sherwin-Williams in November 1980 from the Eagle-Picher Company, reportedly with the understanding that each company would be responsible for environmental problems arising out of its period of ownership. These inspections followed several surveys by DLPC personnel; their reports are attached.

On September 22, Mr. Meehan was questioned concerning wastewater discharges and water drainage from the site. He indicated that there are no wastewater discharges from the plant. Cooling water from equipment water jackets is recirculated from a sump near the northeast corner of the furnaces. No problems were observed with this system.

A brief survey was made of the south portion of the property with Mr. Meehan, who indicated that drainage from the site was to a small pond near the south edge of the property. This pond was observed to be stagnant with no apparent discharge and a high algae content. No samples were collected on this date.

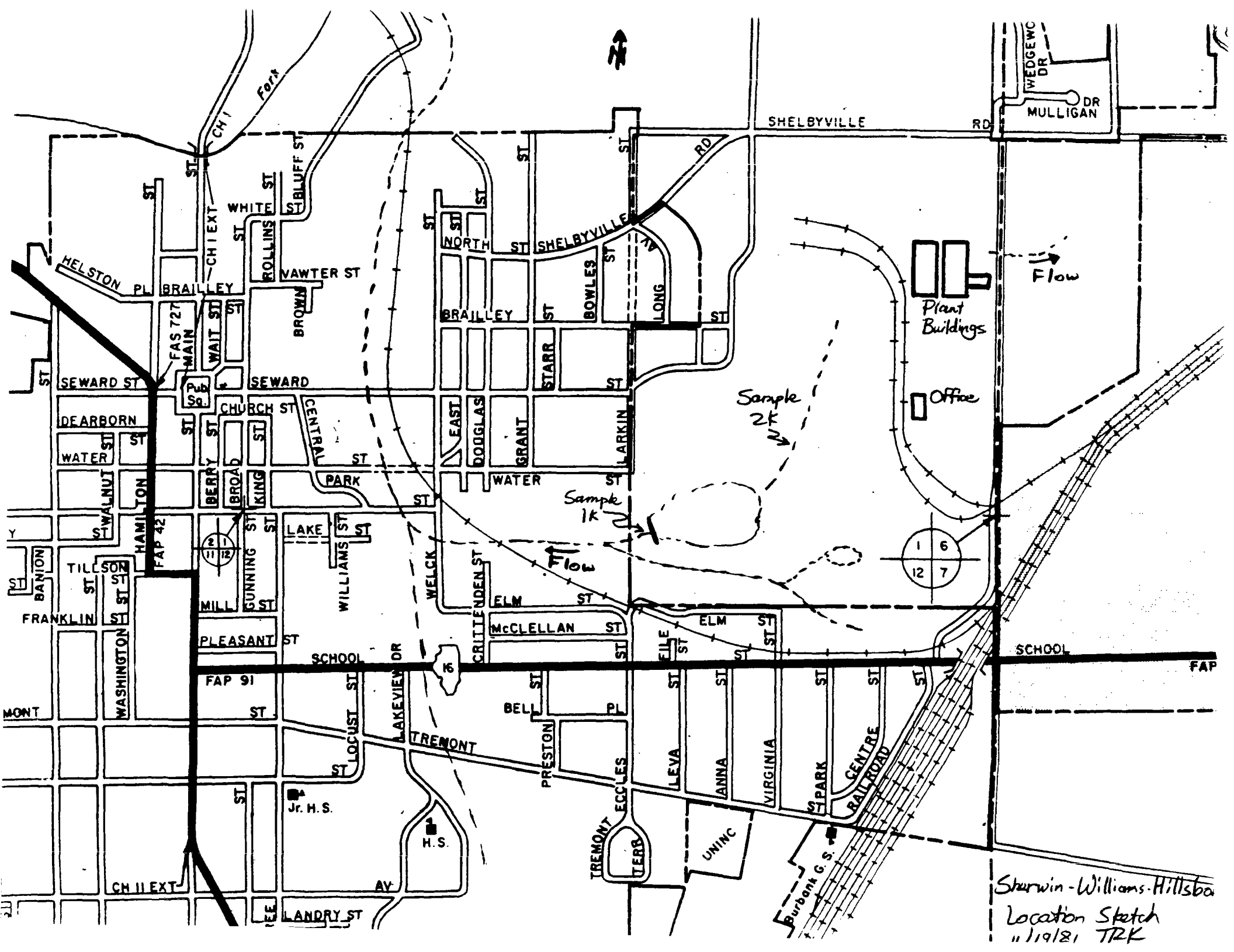
The area to the south and west of the plant contains large amounts of zinc clinker (ore spoil from the zinc oxide manufacturing process). A partial analysis of this material by a consultant for Sherwin-Williams indicated it to be very high in lead and cadmium. Zinc was not analyzed; nickel, barium, and arsenic were also higher than adjacent soil. A small area had been used for dumping of old appliances and building material. The entire area appeared to have a significant potential for contaminated runoff.

On November 19, the site was revisited in an attempt to locate the pond sampled by DLPC; this large pond is not visible from the area previously observed nor was it's existence discussed during the previous visit. A sketch and photographs of the area are attached. Samples were collected upstream and downstream of the pond; flows were estimated at 1-2 gpm at both locations. The pond and discharge were orange in color; the sample results (attached) indicate violations of water quality standards for cadmium, iron, lead, zinc, and copper both upstream and downstream of the pond (cadmium upstream only, lead downstream only).

A more complete sampling survey is to be scheduled in the near future; a letter will be sent to the company following that visit.

JJF/TRK/mh
6-7-82

cc: Region V Springfield


Sherwin-Williams-Hillsboro
Location Sketch
11/19/81 TRK
Flow
Plant Buildings
Office
Sample 2K
Sample 1K
Flow
SHELBYVILLE RD
MULLIGAN DR
WEDGEWOOD DR
CH I Fork
CH I EXT
WHITE ST
ROLLINS ST
BLUFF ST
HELSTON PL
BRAILLEY ST
FAS 727
MAIN ST
WAIT ST
VAWTER ST
BROWN ST
SEWARD ST
Pub Sq
CHURCH ST
DEARBORN ST
WATER ST
BERRY ST
BROAD ST
KING ST
CENTRAL ST
PARK ST
WALNUT ST
HAMILTON ST
FAP 42
LAKE ST
WILLIAMS ST
GUNNING ST
TILLSON ST
BANION ST
FRANKLIN ST
MILL ST
PLEASANT ST
WASHINGTON ST
MONT ST
SCHOOL ST
FAP 91
LOCUST ST
LAKEVIEW DR
TREMONT ST
Jr. H.S.
H.S.
CH II EXT
AV
LANDRY ST
NORTH ST
SHELBYVILLE ST
BRAILLEY ST
EAST ST
DOUGLAS ST
GRANT ST
STARR ST
BOWLES ST
LONG ST
LARKIN ST
WATER ST
WELCK ST
CRITTENDEN ST
ELM ST
McCLELLAN ST
BELL PL
PRESTON ST
TREMONT ECCLES TERR
UNINC
LEVA ST
ANNA ST
VIRGINIA ST
PARK ST
CENTRE ST
RAILROAD ST
Burbank G.S.
SCHOOL ST
FAP
1
6
12
7
16

Date of Photograph: 11/19/81 Time of Photograph: _____

Location of Area Photographed: Sherwin-Williams Hillsboro
lake near W end of site, view approx. E from dam

Photograph Taken by: T. Klug Photo # _____

Date of Photograph: 11/19/81 Time of Photograph: _____

Location of Area Photographed: Sherwin-Williams, Hillsboro
Closer view, same area as above

Photograph Taken by: T. Klug Photo # _____

Date of Photograph: 11/19/81 Time of Photograph: _____

Location of Area Photographed: Sherwin-Williams, Hillsboro
Lake near W end of site, view toward dam at W end

Photograph Taken by: T. Kluge Photo # _____

Date of Photograph: 11/19/81 Time of Photograph: _____

Location of Area Photographed: Sherwin-Williams, Hillsboro
Same location as above, view toward E and plant

Photograph Taken by: T. Kluge Photo # _____

Date of Photograph: 11/19/81 Time of Photograph: _____

Location of Area Photographed: Sherwin-Williams, Hillsboro
Near S edge of property - view toward plant to east

Photograph Taken by: T. Klug Photo # _____

Date of Photograph: 11/19/21 Time of Photograph: _____

Location of Area Photographed: Sherwin-Williams, Hillsboro
View to E from near center of site

Photograph Taken by: T. Kluge Photo # _____

Date of Photograph: 11/19/21 Time of Photograph: _____

Location of Area Photographed: Sherwin-Williams, Hillsboro
Discharge from plant to ditch flowing E from site

Photograph Taken by: T. Kluge Photo # _____

1K

ILLINOIS ENVIRONMENT PROTECTION AGENCY--DIVISION OF WATER POLLUTION CONTROL

SPECIAL ANALYSIS FORM

Time Collected 11 a.m. Sub-Basin Region 5 Springfield

Date Collected 11/19/81 Collector T. Kluge

Facility Name: Sherwin Williams Facility Number: File Town Hillsboro

Stream Name(s) Unnamed trib. Middle Fork Shoal Ck Stream Code:

Source of Sample: (Exact Location) Ditch carrying discharge from reservoir near west edge of property

Physical Observations, Remarks: Orange color, sl. turbid

| Flow | Field Dissolved Oxygen | Field pH | Field Temp. |
|---|---|---|---|

| | | |
|---|---|---|
| 0.002 Arsenic | Coliform/100ml | BOD |
| 0.1 Barium | Fecal Coliform 100 ml | COD |
| Boron | Fecal Strep 100 ml | TS/EC |
| 0.018 Cadmium | Algae (Total) /ml | Susp. Solids |
| 0.03 Copper | Ammonia (N) | Vol. Susp. Solids |
| <0.01 Chromium (tot. ~~Dis~~) | Organic Nitrogen (N) | pH (units) |
| No Bottle Chromium (hex) | Nitrate + Nitrite(N) | Turbidity (JTU) |
| 3.00 Iron (Total) | Phosphorus (P) | Hardness |
| Iron (Dissolved) | Chloride | Alkalinity |
| 0.14 Lead | Fluoride | Total Acidity |
| 0.83 Manganese | Sulfate | Free Acidity |
| Mercury (ppb) | Cyanide | Oil |
| 0.07 Nickel | MBAS | Other (Specify) |
| <0.001 Selenium | Phenol (ppb) | |
| <0.005 Silver | | |
| 2.84 Zinc | | |

Results in mg/l unless otherwise noted.

100% Recycled Paper

Transported by: TK

Received by:

Transported by: GP

Received by:

FOR LAB USE ONLY

Lab Number: B026124 Rec'd by

Date sample rec'd: 20 1981 Time: 1:30

Date analysis completed:

Date results forwarded: DEC 18 1981

Total Tests requested: Tests run:

Lab Section: Supervisor:

73 (AB)

2K ILLINOIS ENVIRONMEN PROTECTION AGENCY--DIVISION OF WATER POLLUTION CONTROL

SPECIAL ANALYSIS FORM

Time Collected 11 a.m. Sub-Basin Region 5 Springfield

Date Collected 11/19/81 Collector T. Kluge

Facility Name: Stewart-Williams Facility Number: File Town Hillsboro

Stream Name(s) Unnamed trib-Middle Fork Shoal Cr Stream Code:

Source of Sample: (Exact Location) Ditch trib to reservoir- near west edge of property

Physical Observations, Remarks: Clear

| Flow | Field Dissolved Oxygen | Field pH | Field Temp. |
|---|---|---|---|

| | | | |
|---|---|---|---|
| 0.003 Arsenic | Coliform/100ml | BOD | |
| 0.1 Barium | Fecal Coliform 100 ml | COD | |
| Boron | Fecal Strep 100 ml | TS/EC | |
| 0.300 Cadmium | Algae (Total) /ml | Susp.Solids | |
| 0.03 Copper | Ammonia (N) | Vol.Susp.Solids | |
| <0.01 Chromium ~~(tot)~~ | Organic Nitrogen (N) | pH (units) | |
| No Bottle Chromium (hex) | Nitrate + Nitrite(N) | Turbidity (JTU) | |
| 42.0 Iron (Total) | Phosphorus (P) | Hardness | |
| Iron (Dissolved) | Chloride | Alkalinity | |
| 0.07 Lead | Fluoride | Total Acidity | |
| 0.91 Manganese | Sulfate | Free Acidity | |
| Mercury (ppb) | Cyanide | Oil | |
| 0.09 Nickel | MBAS | Other (Specify) | |
| <0.001 Selenium | Phenol (ppb) | | |
| <0.005 Silver | | | |
| 14.0 Zinc | | | |

Results in mg/l unless therwise noted.

100% Recycled Paper

Transported by: JK

Received by:

Transported by: AP

Received by:

FOR LAB USE ONLY

Lab Number: B026125 Rec'd by: AG

Date sample rec'd: NOV 20 1981 Time: 11:30

Date analysis completed:

Date results forwarded: DEC 18 1981

Total Tests requested: Tests run:

Lab Section: CHAMPAIGN Supervisor:

73 LAB 3